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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,558	08/28/2006	Martin Ferguson-Pell	117-583 (AMK)	4972
23117 NIXON & VAN	7590 02/25/200 NDERHYE, PC	EXAMINER		
901 NORTH G	LEBE ROAD, 11TH F	MACARTHUR, VICTOR L		
ARLINGTON, VA 22203			ART UNIT	PAPER NUMBER
			3679	
			MAIL DATE	DELIVERY MODE
			02/25/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/578,558	FERGUSON-PELL ET AL.
Office Action Summary	Examiner	Art Unit
	VICTOR MACARTHUR	3679
The MAILING DATE of this communication Period for Reply	appears on the cover sheet wi	ith the correspondence address
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by some any reply received by the Office later than three months after the meanned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNION of 1.136(a). In no event, however, may a rest.  Griod will apply and will expire SIX (6) MON tatute, cause the application to become AE	CATION.  reply be timely filed  ITHS from the mailing date of this communication.  BANDONED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 1 2a) This action is FINAL. 2b)      Since this application is in condition for all closed in accordance with the practice und	This action is non-final. owance except for formal matt	•
Disposition of Claims		
4) ⊠ Claim(s) <u>1-80 and 83</u> is/are pending in the 4a) Of the above claim(s) <u>11,16,17,19-28 as</u> 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-10,12-15,18,29-71,75-80 and 8</u> 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction ar	and 72-74 is/are withdrawn from 13 is/are rejected.	m consideration.
Application Papers		
9) ☐ The specification is objected to by the Exam 10) ☑ The drawing(s) filed on 11 February 2009 is Applicant may not request that any objection to Replacement drawing sheet(s) including the co	s/are: a) $\square$ accepted or b) $\boxtimes$ the drawing(s) be held in abeyar rrection is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for forea.</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents.</li> <li>2. Certified copies of the priority documents.</li> <li>3. Copies of the certified copies of the application from the International But * See the attached detailed Office action for a second content.</li> </ul>	nents have been received. nents have been received in A priority documents have been Ireau (PCT Rule 17.2(a)).	application No received in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s	Summary (PTO-413) s)/Mail Date nformal Patent Application 

#### **DETAILED ACTION**

### Status of Claims

Claims 1-10, 12-15, 18, 29-71, 75-80 and 83 are rejected.

Claims 11, 16, 17, 19-28, 72-74 are withdrawn.

Claims 81 and 82 are canceled.

# Note to Applicant Regarding Compact Prosecution

The applicant is entitled to as many claims as necessary to define the invention.

However, in the interest of compact prosecution the examiner strongly suggests that a reply to this office action include an amendment to reduce the number of claims as follows.

- Reduce the number of independent claims (preferably to a single claim) and amend to
  recited the broadest scope, therein, to which the applicant feels will overcomes the prior
  art.
- Include dependant claims, which positively recite all of the structure the applicant deems critical to the invention and that the applicant would be willing to accept in an allowance. This insures that the applicant will be presented with all of the prior art pertinent to the invention (see MPEP § 904.03).

The above guidelines should be adhered to as early in the prosecution as possible, preferably in the original presentation of claims. The current version of claims is so numerous and replete with error so as to make efficient prosecution impossible. Note that even applicant's representative is having trouble keeping track of the current list of claims (Note applicant's

representative's statement in the filing of 2/11/2009 that claims 74-83 read on the elected

species. Note also that claims 81 and 82 were in fact canceled in the filing of 5/8/2006).

If the applicant insists on maintaining the current enormous body of claims, the examiner

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suggests carefully reviewing them for any errors (objections and rejections) that exist in addition

to those found and noted below, such as lack of antecedent basis for terms, improper double

inclusions, etc.

Election/Restrictions

Applicant's election without traverse of Species 1, Figs.1A-9 and 28, in the reply filed on

2/11/2009 is acknowledged.

Claims 11, 16, 17, 19-28, 72-74 withdrawn from further consideration pursuant to 37

CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or

linking claim. Election was made without traverse in the reply filed on 2/11/2009.

Contrary to applicant's statement regarding the claims, note the following:

• Claim 74 does not read on the elected species since it depends from non-elected

claim 73.

• Claims 81 and 82 do not read on the elected species since they were canceled in

the filing of 5/8/2006.

Drawings

The drawings were received on 2/11/2009. These drawings are acceptable for the

purposes of examination.

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The drawings are objected to for the following:

• Shading in figures 8-15c and 19A-20F is not permitted. See 37 CFR 1.84(m).

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A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Corrected drawing sheets in compliance with 37 CFR 1.84 and 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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## Claim Objections

The claims are objected to because of the following informalities:

• Each element or step of the claims has not been separated by a line indentation. see 37 CFR 1.75 and MPEP § 608.01(i)-(p).

- There are misspellings in the claims. Take for instance "neighbouring" (line 3 of claim 1 which should be --neighboring--.
- The numbering of claims is incorrect. A series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim. A claim which depends from a dependent claim should not be numerically separated by any claim which does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. See MPEP § 608.01(n). For instance, claim 36 depends from dependent claim 9 but is improperly numerically separated from claim 9 by dependent claims 29-35. Also, claim 62 depends from dependent claim 60, but is improperly separated from claim 60 by claim 61 which depends from 53.
- Claim 34 improperly depends from itself.

Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

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## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10, 12-15, 18, 29-71, 75-80 and 83 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform to current U.S. practice as follows:

- The limitation "being connected together" (line 2 of claim 1) is previously set forth in lines 1-2 thereby presenting a confusing double inclusion. Does the second recitation mean to refer to the first connection or to additional connections?
- It is unclear if "a neighboring module" (lines 3-4 of claim 1) means to refer to one of the previously recited "plurality of modules" (line 1 of claim 1) or to additional modules.
- The claims are replete with confusing double inclusions which render the scope unclear. For instance, it is unclear if "a module" (line 1 of claim 2, and elsewhere throughout the claims) is meant to refer to the previously recited "plurality of modules" (line 1 of claim 1), or to an additional element.
- The pronoun "it" (claim 2 and elsewhere throughout the claims) renders the scope of the claims unclear since one cannot determine what element "it" is meant to refer to.

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• The term "ball/socket" (line 2 of claim 18 and elsewhere throughout the claims) is unclear. Does the term mean --ball or socket--, --ball type socket--, --socket of a ball--, or some other structure.

For the reasons mentioned above a great deal of confusion and uncertainty exists as to the proper interpretation of the claim limitations. In accordance with the MPEP § 2173.06, rejection under 35 U.S.C. 102 or 35 U.S.C. 103 follows based on the examiner's best understanding of the claim scope. The applicant is strongly urged to amend the entirety of the claims (not only the examples listed above) to conform to current U.S. practice.

#### Claim Rejections - 35 USC § 102/ § 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10, 12-15, 18, 29-71, 75-80 and 83 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kramer (U.S. Patent 4,142,816).

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The prior art appears to disclose all of the applicant's claimed structural limitations as best understood by the examiner (see 35 U.S.C. § 112 2<sup>nd</sup> paragraph rejections above).

The prior art structure is presumed to be fully capable of performing applicant's functional limitations in accordance with MPEP 2112.01(I).

Claims 1-10, 12-15, 18, 29-71, 75-80 and 83 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cousins (U.S. Patent 4,367,897).

The prior art appears to disclose all of the applicant's claimed structural limitations as best understood by the examiner (see 35 U.S.C. § 112 2<sup>nd</sup> paragraph rejections above).

The prior art structure is presumed to be fully capable of performing applicant's functional limitations in accordance with MPEP 2112.01(I).

Claims 1-10, 12-15, 18, 29-71, 75-80 and 83 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Stammbach (U.S. Patent 3,256,785).

The prior art appears to disclose all of the applicant's claimed structural limitations as best understood by the examiner (see 35 U.S.C. § 112 2<sup>nd</sup> paragraph rejections above).

The prior art structure is presumed to be fully capable of performing applicant's functional limitations in accordance with MPEP 2112.01(I).

Claims 1-10, 12-15, 18, 29-71, 75-80 and 83 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cousins (U.S. Patent 4,484,778).

The prior art appears to disclose all of the applicant's claimed structural limitations as best understood by the examiner (see 35 U.S.C. § 112 2<sup>nd</sup> paragraph rejections above).

The prior art structure is presumed to be fully capable of performing applicant's functional limitations in accordance with MPEP 2112.01(I).

Claims 1-10, 12-15, 18, 29-71, 75-80 and 83 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Brockway (U.S. Patent 3,583,091).

The prior art appears to disclose all of the applicant's claimed structural limitations as best understood by the examiner (see 35 U.S.C. § 112 2<sup>nd</sup> paragraph rejections above).

The prior art structure is presumed to be fully capable of performing applicant's functional limitations in accordance with MPEP 2112.01(I).

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (571) 272-7085. The examiner can normally be reached on 8:30am - 5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

February 25, 2009

/Victor MacArthur/ Primary Examiner, Art Unit 3679